CINCINNATI

RENNEDY AVENUE BRIDGE REPLACEMENT Department of Transportation & Engineering

December 5, 2017

INTRODUCTION

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PROJECT PERSONNEL

Department of Transportation & Engineering

- Brandon Lecrone, P.E., Senior Engineer *Project Manager*
- Bill Shefcik, P.E., Principal Engineer Bridge Program Manager
- Jeff Stine, R.A., Senior Architect

 Project Architect



PROJECT PERSONNEL

Environmental Consultant - AECOM

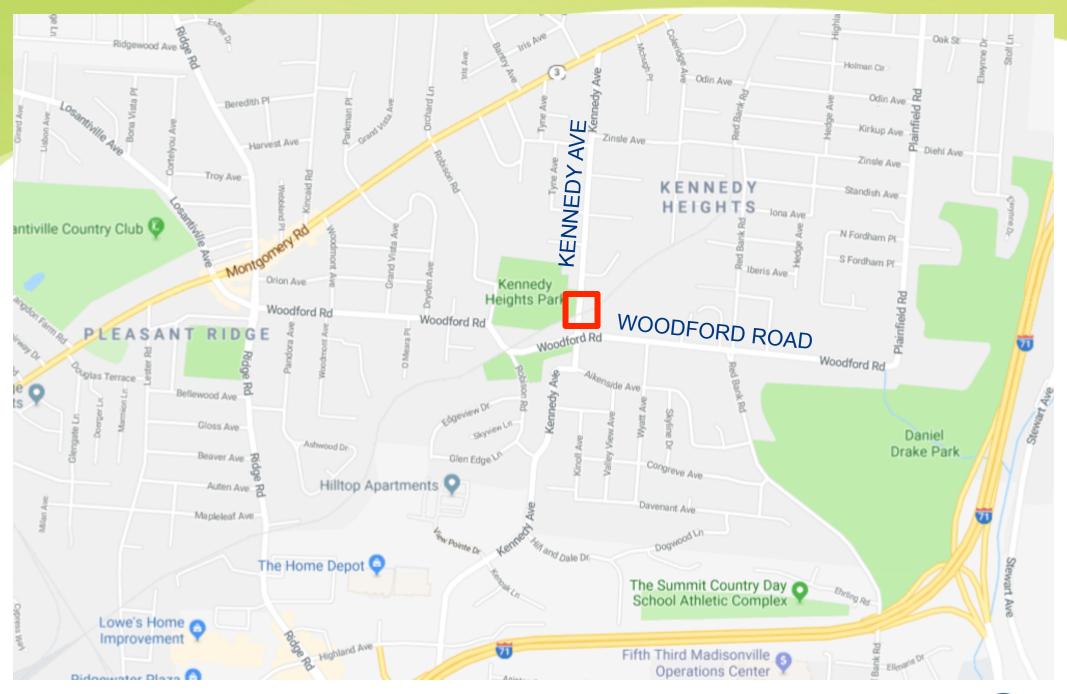
• Dave Wormald, P.E.



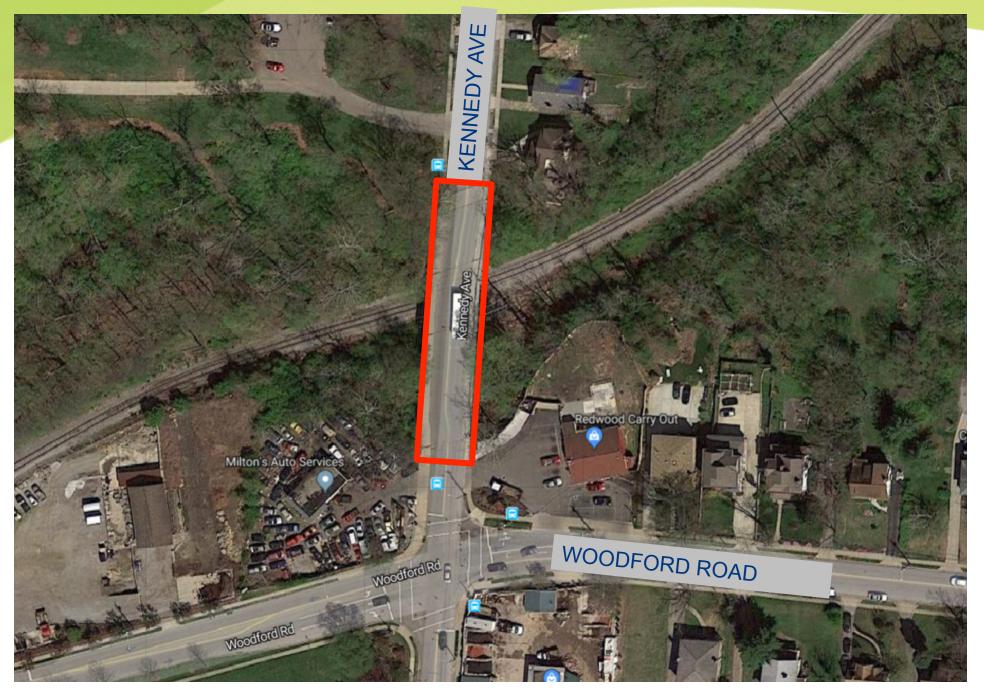
PURPOSE OF THE OPEN HOUSE

- PROVIDE A BASIC UNDERSTANDING OF THE PROJECT
- HEAR FEEDBACK & RECEIVE COMMENTS
- ANSWER QUESTIONS











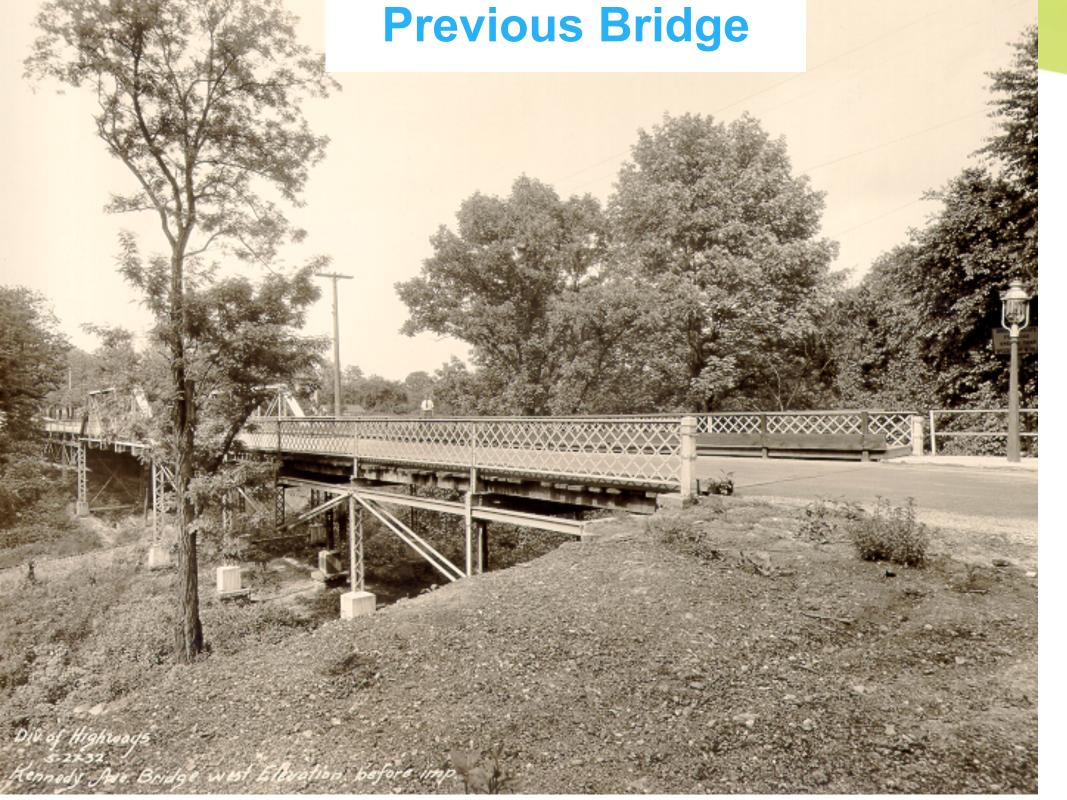
GENERAL PROJECT INFORMATION

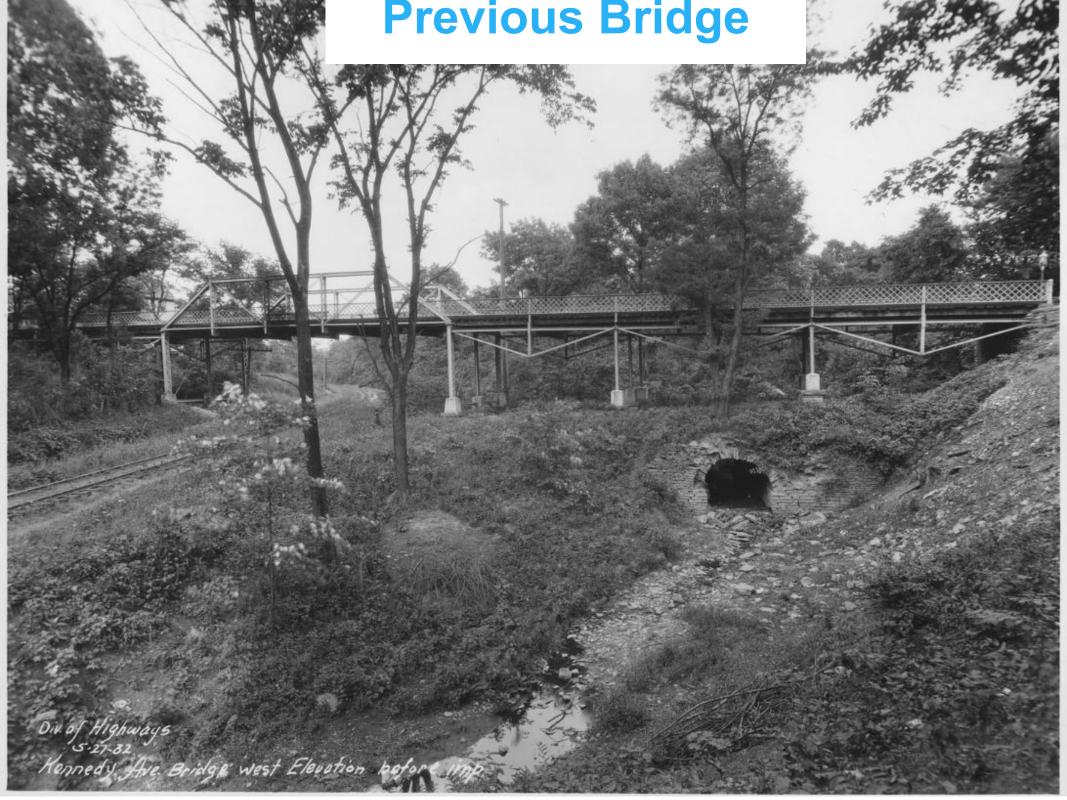
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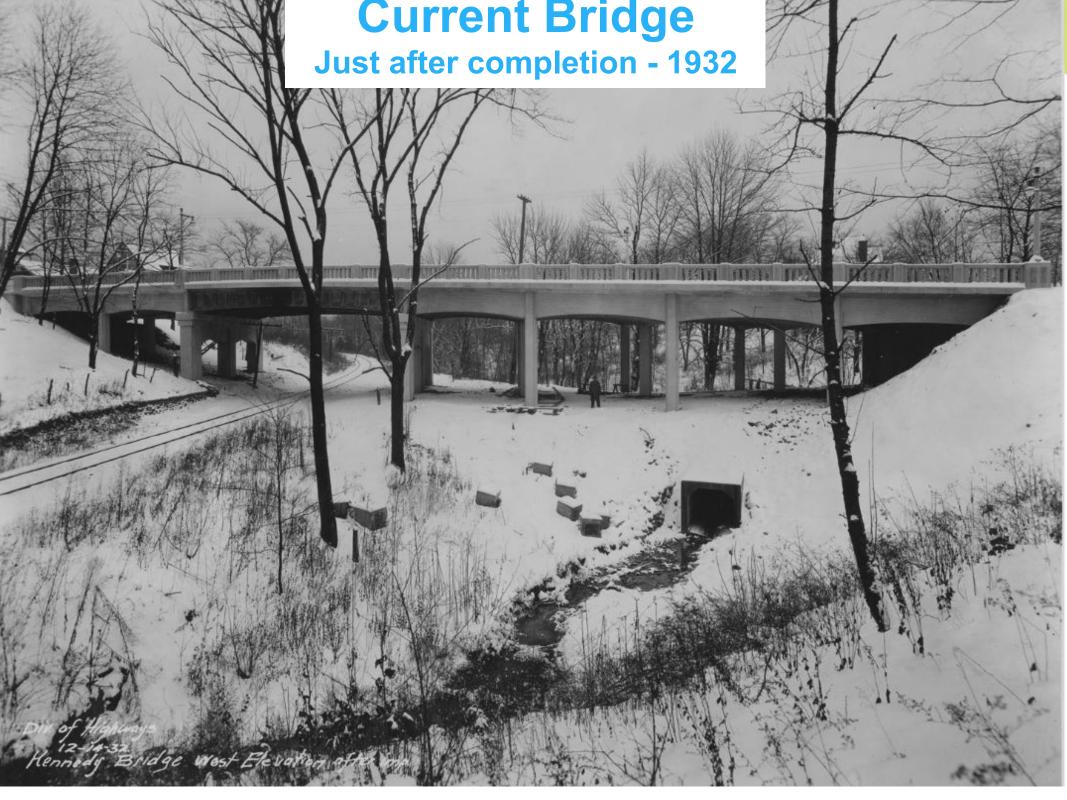
BACKGROUND

- Bridge was built in 1932
- Last rehabilitation in 1999 (Deck overlay)
- Structural repairs in 2015











EXISTING CONDITIONS

- •Current condition rating "4" (Poor) on a 0 to 9 scale
- Classified as Structurally Deficient
- Inspected annually
- Safe for all legal vehicles



EXISTING CONDITIONS

- Widespread concrete deterioration
- Bearings are badly corroded and don't function fully
- •Cracking of concrete beams, partially due to reduced function of bearings
- Shoring installed on 4 beams (2015 repairs)



CONCRETE DETERIORATION





BOTTOM OF DECK



PIER COLUMN

CONCRETE DETERIORATION





BEARING STRUCTURAL REPAIR



PURPOSE & NEED

- To replace the existing structurally deficient bridge with a new bridge in order to maintain this link in the transportation network.
- The existing 85 year old bridge has exceeded its useful life.
- Deterioration is widespread and has advanced to the point where repair or rehabilitation is no longer feasible, and replacement is necessary.



PROJECT FINANCES

- Construction Cost Approximately \$2.9 Million
- •Construction is funded 100% with Federal grant monies



PROJECT TIMELINE

• Complete Design Activities: 2018

Right-of-Way Acquisition: 2018-2019

Utility Relocation: 2019

• Construction: 2019-2020



DESIGN DETAILS - BRIDGE

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DESIGN DETAILS - BRIDGE

Existing Bridge:

Length ~206 feet

Number of Spans7

Proposed Bridge:

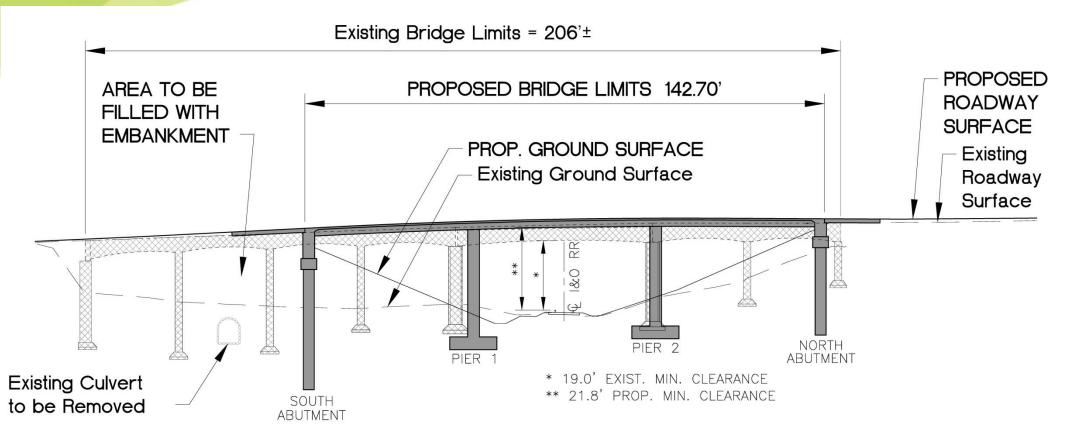
Length ~143 feet

Number of Span3









BRIDGE ELEVATION

Existing Bridge - To Be Removed











--- Existing Bridge





DESIGN DETAILS - BRIDGE

Existing Bridge:

Roadway width 30 feet

Number Traffic Lanes

Sidewalks
 6.5 feet each side

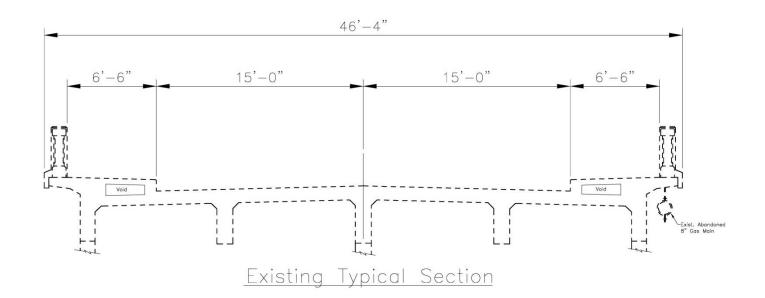
Proposed Bridge:

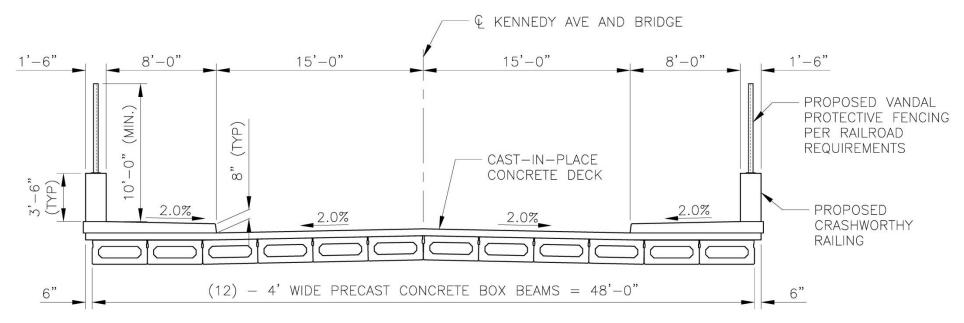
Roadway width 30 feet

Number Traffic Lanes

Sidewalks
 8 feet each side









BRIDGE AESTHETICS

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Existing Kennedy Ave Bridge









Bridge Railing Systems











Bridge Terminus Pylons











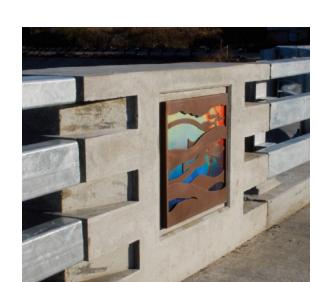
Bridge Identification Pylons











Bridge Vandal Protection Facing Systems (VPF)









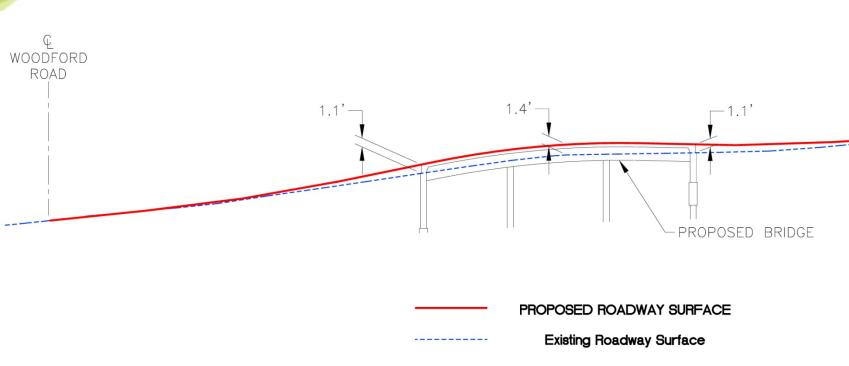
DESIGN DETAILS - ROADWAY

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DESIGN DETAILS - ROADWAY

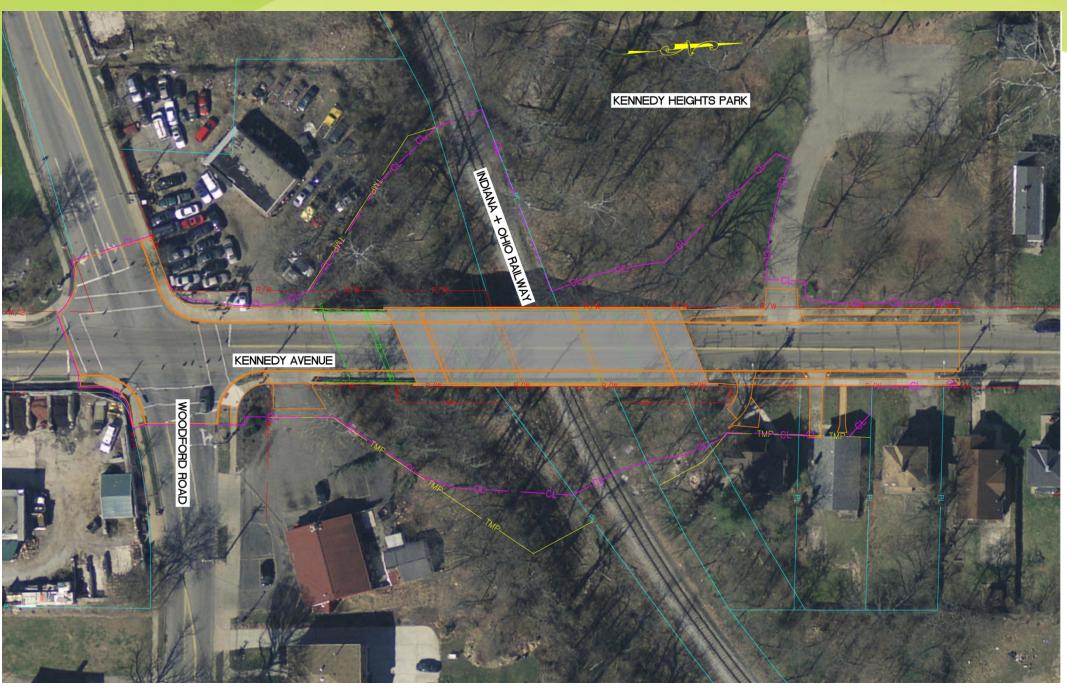
- Paving of Kennedy Avenue will extend approximately 200 feet from each end of the bridge
- Includes intersection at Woodford Road
- Roadway Profile will be raised:
 - To provide the required clearance over the RR
 - Maximum of 1.4' in the middle of the bridge
 - Approximately 1.1' at each end of the bridge





KENNEDY AVE PROPOSED ROADWAY PROFILE







CONSTRUCTION CONSIDERATIONS

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BUILD BRIDGE IN PHASES VS. ALL AT ONCE



BUILD IN PHASES

Existing site does not accommodate building in phases

- Bridge width inadequate
- Spacing/Location of existing beams
- Width of available right-of-way



BUILD IN PHASES

Even if phasing were possible:

- Construction duration would nearly double
 - 1 Construction season → 2
- Cost would increase significantly

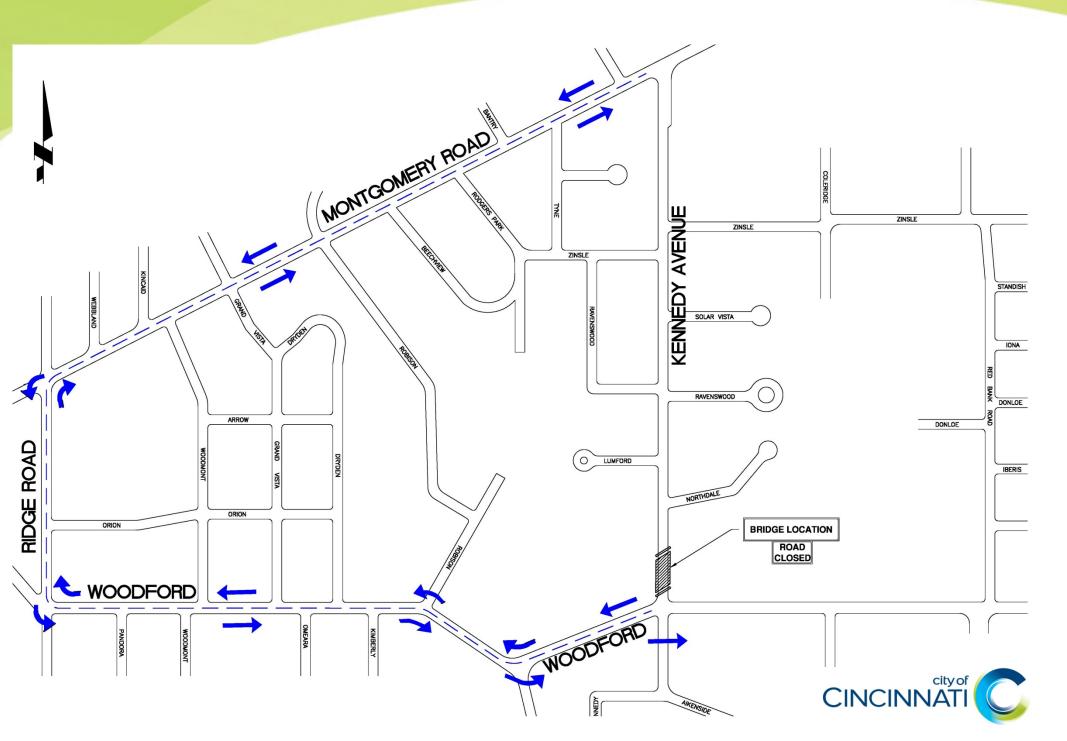


BUILD ALL AT ONCE (SELECTED OPTION)

- Project will be completed in one construction season
- Kennedy Avenue will be closed to traffic
- Duration of the closure will be 6 to 9 months
- Detour: Woodford > Ridge > Montgomery >
 Kennedy



DETOUR ROUTE



ENVIRONMENTAL

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ENVIRONMENTAL

Noise & Air Quality

No Impacts

Environmental Justice

Temporary Closure of Kennedy Ave

Cultural Resources

No Impacts

Ecological Resources

No Impacts

Parks & Recreation (4f)

De-Minimis Impact (anticipated)

- Hazardous Materials
 - ESA Screening Completed
 - Awaiting Determination for Phase 1 ESA

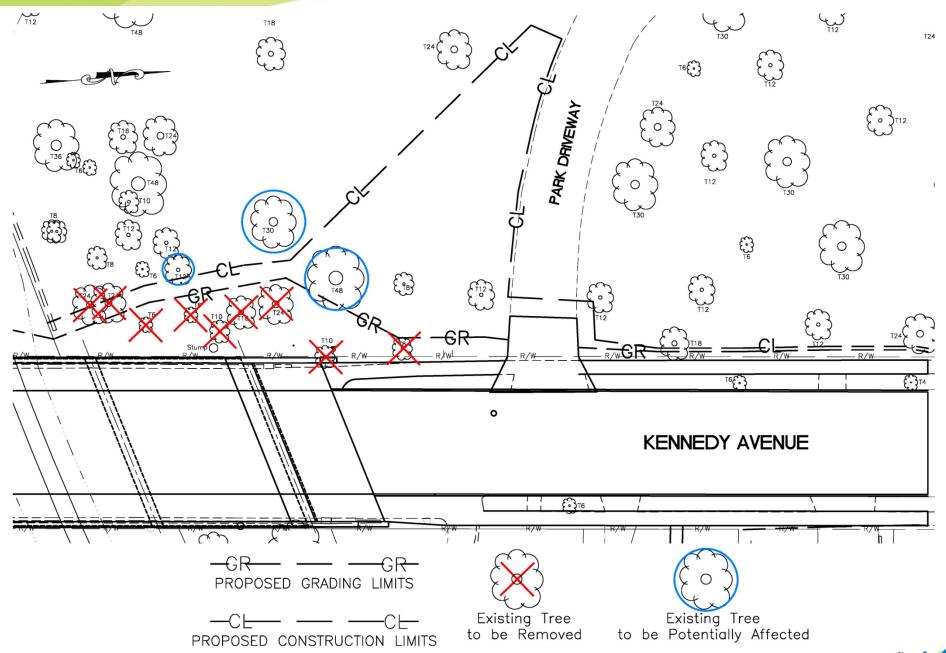
Relocations

None



ENVIRONMENTAL

Parks & Recreation – Affected Trees





Project website address:

www.cincinnati-oh.gov/dote/dote-projects/kennedy-avenue-bridge-replacement

By Navigation:

Go to:

www.cincinnati-oh.gov/dote

- → Click on "Projects" on the left hand side
- → Click on "Kennedy Avenue Bridge Replacement"



Your Comments:

- Comment sheets available
- Email or call:
 - brandon.lecrone@cincinnati-oh.gov
 - 513-352-6106
- For inclusion in the environmental documentation, please submit comments by January 5, 2018
- Otherwise, comments can be made anytime

